

## II. SPECIFICATION AMENDMENTS

Please amend the paragraph on page 1, line 28 through page 2, line 6 as shown:

However, with the disclosed measurement setup it is not possible to measure PMD or PDL. Moreover, the measurement setup disclosed in this article causes problems because to enable the detectors used to detect the signals of reflection and transmission of both directions simultaneously, i.e. the reflected signal of one direction superimposed with the transmitted signal of the other direction and the transmitted signal of one direction superimposed with the reflected signal of the other direction, differences between the measurement and the reference path lengths are necessary to ~~distinct~~distinguish between these signals without really knowing all impacts of these differences.

Please amend the paragraph on page 5, lines 11-22 as shown:

Fig. 2 shows a second embodiment 200 of a measurement setup according to the present invention. Contrary to the embodiment 1 of Fig. 1 embodiment 200 of Fig. 2 has no switch 81. Instead in setup 200 a shunt 281 replaces switch 81. The shunt 281 provides the reference arm 2 and the measurement arm 86 with the signal 80, simultaneously. To ~~distinct~~distinguish the signals propagating through the DUT 6 the two fractions of the light propagating through the DUT in opposite directions are coded by two different modulation frequencies f1 and f2 provided by two modulation units 201 and 202 providing a signal 80-f1 and a signal 80-f2. Then, the signals 80-f1 and 80-f2 are detected by using a PDR 206 and a PDR 208 having a phase sensitive detection scheme, i.e. by a frequency selective detection. Additionally, the element 12 contains a ~~(not shown) modulation units~~unit 203 to key all signals transmitted or reflected by the element 12 with a modulation frequency f3.